

AMENDMENTS TO THE CLAIMS

A marked-up version of the claims that will be pending following entry of the present amendments showing the amendments made herein follows. Matter that has been deleted from the claims is indicated by strikethrough and matter that has been added is indicated by underlining.

1. (Previously Amended) A method of preparing a composition comprising a mixture of cells derived from human liver tissue, which mixture comprises an enriched population of human liver progenitors, the method comprising:
 - (a) providing a cell suspension of human liver tissue comprising a mixture of cells of varying sizes, including immature cells and mature cells; and
 - (b) debulking the suspension based on cell size, buoyant density, or a combination thereof to remove mature cells, while retaining immature cells,
to provide a mixture of cells comprised of an enriched population of human liver progenitors.
2. (Original) The method of claim 1 in which the liver tissue is obtained from a fetus, a neonate, an infant, a child, a juvenile, or an adult.
3. (Original) The method of claim 1 in which the immature cells have a diameter less than about 15 microns.

4. (Original) The method of claim 1 in which the enriched population comprises human diploid liver cells.

5. (Original) The method of claim 1 in which the liver progenitors are hepatic progenitors, hemopoietic progenitors, mesenchymal progenitors, or mixtures thereof.

6. (Original) The method of claim 1 in which the alpha-fetoprotein is full-length alpha-fetoprotein.

7. (Cancelled).

8. (Previously Amended) The method of claim 1 in which the debulking step comprises centrifugal elutriation, density gradient centrifugation, countercurrent fluid flow, continuous-flow centrifugation, zonal centrifugation, or combinations thereof.

9. (Original) The method of claim 1 which further comprises selective lysis of the mature cells.

10. (Cancelled).

11. (Cancelled).

12. (Currently Amended) A method of preparing a composition comprising an enriched population of human hepatic progenitors comprising:

- (a) providing a cell suspension of human liver tissue,
- (b) debulking the suspension based on cell size, buoyant density, or a combination thereof to remove mature cells, and
- (c) subjecting the debulked suspension to a positive or negative immunoselection, such that a mixture of cells is provided, which mixture of cells is comprised of an enriched population of human ~~liver~~ hepatic progenitors, which ~~human liver~~ hepatic progenitors themselves, their progeny, or more mature forms thereof exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.

13. (Cancelled).

14. (Original) The method of claim 12 in which the immunoselection comprises selecting cells that express markers associated with hemopoietic cells, cells that express markers associated with hepatic cells, cells that express markers associated with mesenchymal cells, or combinations thereof.

15. (Original) The method of claim 12 in which the immunoselection comprises selecting from the suspension those cells, which themselves, their progeny, or more mature forms thereof exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.

16. (Original) The method of claim 15 which further comprises selecting those cells which themselves, their progeny, or more mature forms thereof produce full-length alpha-fetoprotein mRNA.

17. (Original) The method of claim 12 in which the immunoselection comprises selecting from the suspension those cells that express an adult liver cell-specific marker.

18. (Original) The method of claim 12 in which the immunoselection comprises selecting those cells, which themselves, their progeny, or more mature forms thereof express CD14, CD34, CD38, ICAM, CD45, CD117, glycophorin A, connexin 32, osteopontin, bone sialoprotein, collagen I, collagen II, collagen III, collagen IV, or combinations thereof.

19. (Original) The method of claim 12 which the immunoselection comprises selecting those cells, which themselves, their progeny, or more mature forms thereof further express alpha-fetoprotein-like immunoreactivity, albumin-like immunoreactivity, or a combination thereof.

20-37. (Cancelled).

38. (Original) A cell culture comprising the composition of claim 21, an extracellular matrix component, and a culture medium.

39-44. (Cancelled).

45. (Previously Amended) The method of claim 1 in which the progenitors have a diameter between 5 and 15 microns.

46. (Previously Amended) The method of claim 45 in which the progenitors have a diameter between 8 and 9.4 microns.

47. (Previously Added) The method of claim 1 which further comprises selecting those cells which their progeny, or more mature forms thereof exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.

48. (Previously Added) The method of claim 47 in which the selection step comprises panning, affinity chromatography, tagging with fluorescent labels, use of magnetic beads, or combinations thereof.